

What is claimed is:

1 1. A distributed information integrating method for integrating
2 information distributively stored in plural processing devices by any one of plural
3 processing devices in a distributed information processing system in which the
4 plural processing devices are connected to one another through transmission
5 media and a series of processing operations are distributively performed,
6 comprising the steps of:

7 collecting, by at least one first processing device, data stored in the first
8 processing device according to a predetermined collecting condition in response
9 to occurrence of an event serving as a trigger;

10 transmitting, by the first processing device, the collected data to a
11 second processing device of an original data request side; and

12 integrating, by a second processing device, the collected data received
13 by the second processing device according to a predetermined integrating
14 condition.

1 2. The integration method as claimed in claim 1, wherein said event is
2 one of reception of a message having predetermined data, renewal of preset
3 data which occurs in said first processing device, and timer interruption of a
4 periodic timer which occurs in said first processing device.

1 3. The integration method as claimed in claim 1, wherein one of plural
2 data collection processes which are independently performed by plural first
3 processing devices is performed by said second processing device, and the data

4 thus collected are used as one collection data for data integration which is
5 performed by said second processing device.

1 4. A distributed information integrating apparatus for collecting and
2 integrating information which is distributively stored in plural processing devices
3 in a distributed information processing system in which the plural processing
4 devices are connected to one another through transmission media and a series
5 of processing operations are distributively performed, comprising:

6 first table means into which each processing device stores the name of
7 data to be collected, which are stored therein, and a transmission destination of
8 the collected data in association with a specific event;

9 first processing means for referring to said first table means in
10 response to an event occurring for each processing device and a message event
11 received through said transmission media to collect the data stored in the
12 processing device and transmit the collected data to said transmission
13 destination;

14 second table means for setting the items of data to be integrated while
15 dividing the items for every data name of the collection data; and

16 second processing means for receiving the collection data from
17 another processing device or said first processing means, integrating the
18 collection data according to the setting of said second table means, and
19 transmitting the integrated data to a request side therein.

1 5. The apparatus as claimed in claim 4, wherein said request side is said
2 first processing means.

1 6. The apparatus as claimed in claim 4, wherein said event is one of
2 reception of a message having predetermined data, renewal of preset data
3 which occurs in said first processing device and timer interruption of a periodic
4 timer which occurs in said first processing device.

1 7. The apparatus as claimed in claim 4, wherein said second table
2 means has an item for setting an AND/OR condition of plural collection data to
3 be integrated, and wherein in the case where the AND condition is set in said
4 item, said second processing means delivers all plural collection data to be
5 integrated to said request side when all the plural collection data are arranged,
6 and in the case where the OR condition is set, said second processing means
7 delivers received collection data to said request side without waiting until all the
8 collection data are arranged.

1 8. The apparatus as claimed in claim 4, wherein said second table
2 means has an item for setting "event type" or "demand type" as a method of
3 receiving/delivering the integrated plural collection data to said request side, and
4 wherein in the case where the "demand type" is set as the reception/delivery
5 method, said second processing means delivers the collection data to said
6 request side when said request side transmits a data request, and in the case
7 where the "event type" is set, said second processing means delivers the
8 collection data to said request side irrespective of no request from said request
9 side.

1 9. The apparatus as claimed in claim 4, wherein said second table
2 means has an item for setting a limit time which is taken from the collection start

3 time of plural collection data to be integrated until the collection end time of all
4 the collection data, and said second processing means manages the limit time.

1 10. The apparatus as claimed in claim 4, wherein each of said first and
2 second table means has an active-status item for setting validity/invalidity of
3 each record thereof, and said apparatus further includes third table means for
4 managing the occurrence frequency of a specific event to start or end the
5 integration processing of the collection data, and third processing means for
6 referring to/renewing said third table means and validating or invalidating the
7 active status of each record of said first and second processing table means on
8 the basis of the reference/renewal result.

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